

Application No. 10/772,557
Response to Office Action dated 4/11/05
Atty. Docket No. 027298-9055

Amendments to the Claims:

Please **CANCEL** Claims 41-44, 48-52, and 56-61.

Please **ADD** Claims 62-81 as indicated in the listing of claims below. This listing of claims will replace all prior versions and listings of claims in the Pending Application:

1-61. (canceled)

62. (new) A method for assembling a bearing assembly for a rotor, the bearing assembly including a bearing cage, and a housing, the method comprising:

 forming a longitudinally extending opening in the housing;

 forming two longitudinally extending cantilevered springs in the bearing cage; and

 inserting the bearing cage into the opening in the housing so that the two longitudinally extending cantilevered springs form a fluid seal with the housing.

63. (new) The method of Claim 62 further comprising forming a recess in the bearing cage.

64. (new) The method of Claim 63 further comprising inserting a tilt pad into the recess in the bearing cage.

65. (new) The method of Claim 62 wherein forming the two cantilevered springs in the bearing cage includes forming the two cantilevered springs symmetrically about the opening in the housing.

66. (new) The method of Claim 62 wherein forming the two cantilevered springs in the bearing cage includes forming two longitudinally extending grooves in the bearing cage.

67. (new) The method of Claim 62 wherein forming the two cantilevered springs in the bearing cage includes forming an enlarged portion on the cantilevered springs.

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68. (new) The method of Claim 67 wherein inserting the bearing cage into the opening in the housing includes engaging the enlarged portion on the cantilevered springs with the housing to form the fluid seal.
69. (new) The method of Claim 62 further comprising forming a radially extending passage through the bearing cage.
70. (new) The method of Claim 62 further comprising forming a radially extending passage through the housing.
71. (new) The method of Claim 62 further comprising forming a first radially extending passage through the bearing cage and a second radially extending passage through the housing, wherein inserting the bearing cage into the opening in the housing includes inserting the bearing cage so that the first and second radially extending passages are in fluid communication with each other.
72. (new) The method of Claim 62 further comprising forming two longitudinally extending cantilevered springs in the housing.
73. (new) The method of Claim 72 wherein forming the two cantilevered springs in the housing includes forming the two cantilevered springs symmetrically about the opening in the housing.
74. (new) The method of Claim 72 wherein forming the two cantilevered springs in the housing includes forming two longitudinally extending grooves in the housing.
75. (new) The method of Claim 72 further comprising forming an enlarged portion on the cantilevered springs formed in the bearing cage.
76. (new) The method of Claim 75 wherein inserting the bearing cage into the opening in the housing includes engaging the two cantilevered springs formed in the housing with the enlarged portion on the cantilevered springs formed in the bearing cage to form the fluid seal.

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77. (new) A method for assembling a bearing assembly for a rotor, the bearing assembly including a bearing cage, and a housing, the method comprising:

forming a longitudinally extending opening in the housing;

forming two longitudinally extending cantilevered springs in the housing; and

inserting the bearing cage into the opening in the housing so that the two longitudinally extending cantilevered springs form a fluid seal with the bearing cage.

78. (new) The method of Claim 77 further comprising forming an enlarged portion on the bearing cage.

79. (new) The method of Claim 78 wherein inserting the bearing cage into the opening in the housing includes engaging the two longitudinally extending cantilevered springs with the enlarged portion of the bearing cage to form a fluid seal.

80. (new) A method for assembling a rotor, the method comprising:

assembling a bearing assembly that includes a bearing cage, and a housing, wherein assembling the bearing assembly includes:

forming a longitudinally extending opening in the housing;

forming two longitudinally extending cantilevered springs in the bearing cage;

and

inserting the bearing cage into the opening in the housing so that the two longitudinally extending cantilevered springs form a fluid seal with the housing; and inserting the rotor into an opening in the bearing cage.

81. (new) A method for assembling a rotor, the method comprising:

assembling a bearing assembly that includes a bearing cage, and a housing, wherein assembling the bearing assembly includes:

forming a longitudinally extending opening in the housing;

forming two longitudinally extending cantilevered springs in the housing; and

inserting the bearing cage into the opening in the housing so that the two

longitudinally extending cantilevered springs form a fluid seal with the bearing cage; and

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inserting the rotor into an opening in the bearing cage.